

FIG.1 Circuits of HRPD Config. 1

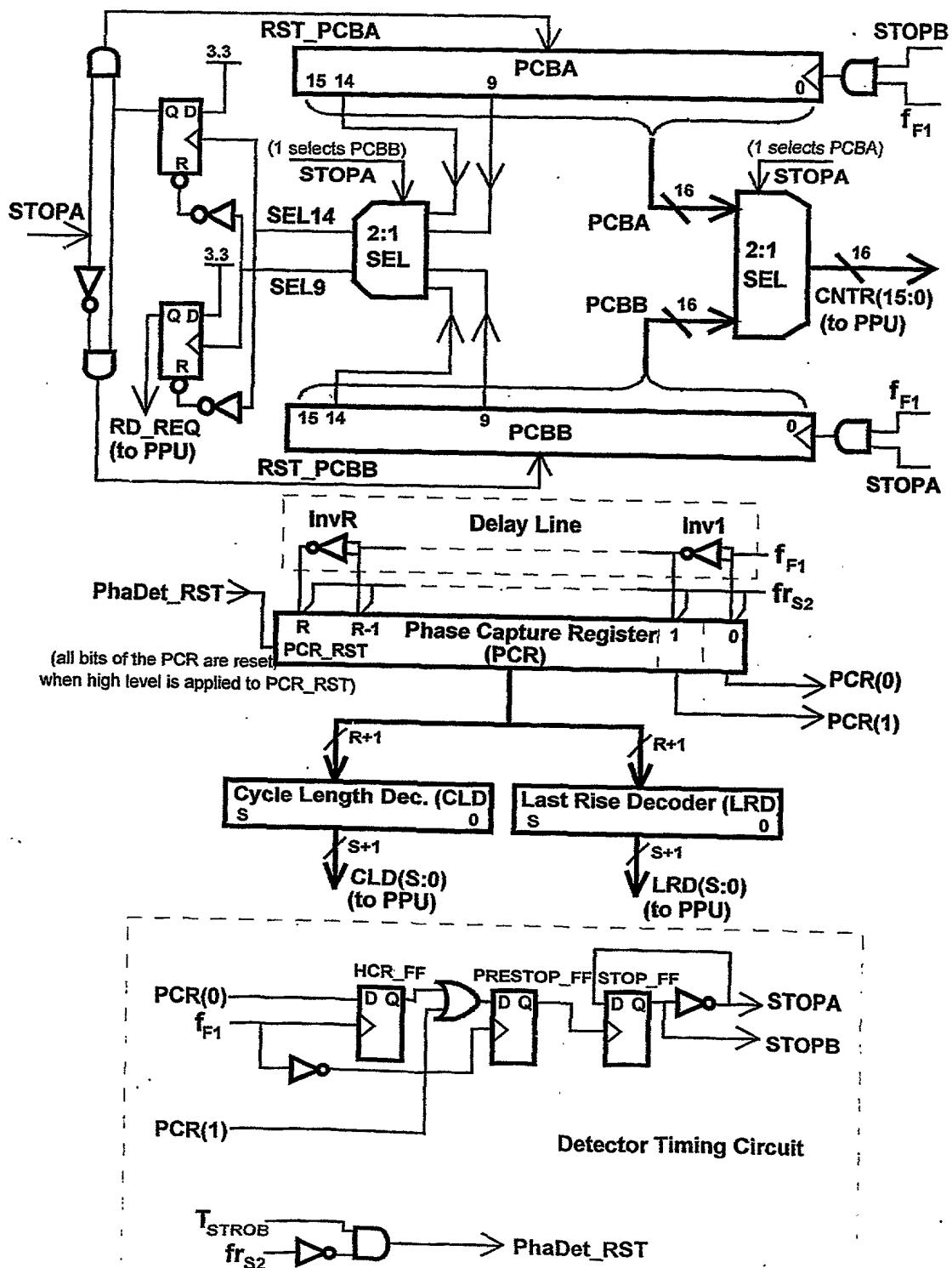
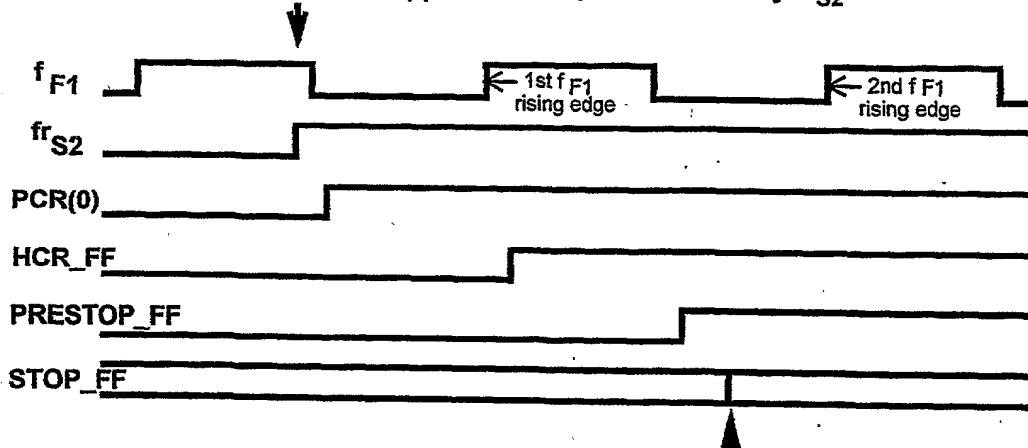


FIG.2 Timing Analysis of HRPD Config.1

**For PCR(0)=1:**

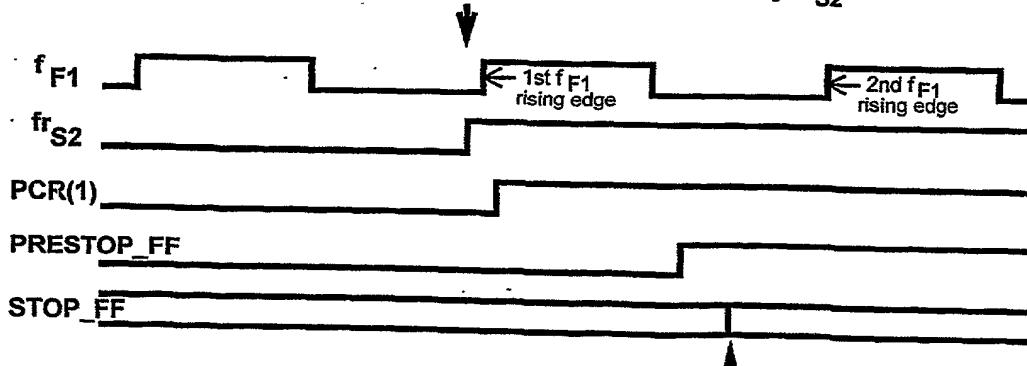
This arrow indicates  $f_{S2}$  appearance versus  $f_{F1}$  wave.  
The left side of the  $f_{F1}$  wave is captured in PCR by  $f_{S2}$ .



This arrow indicates  $STOP\_FF$  switching,  
before a second appearance of  $f_{F1}$  rising edge.

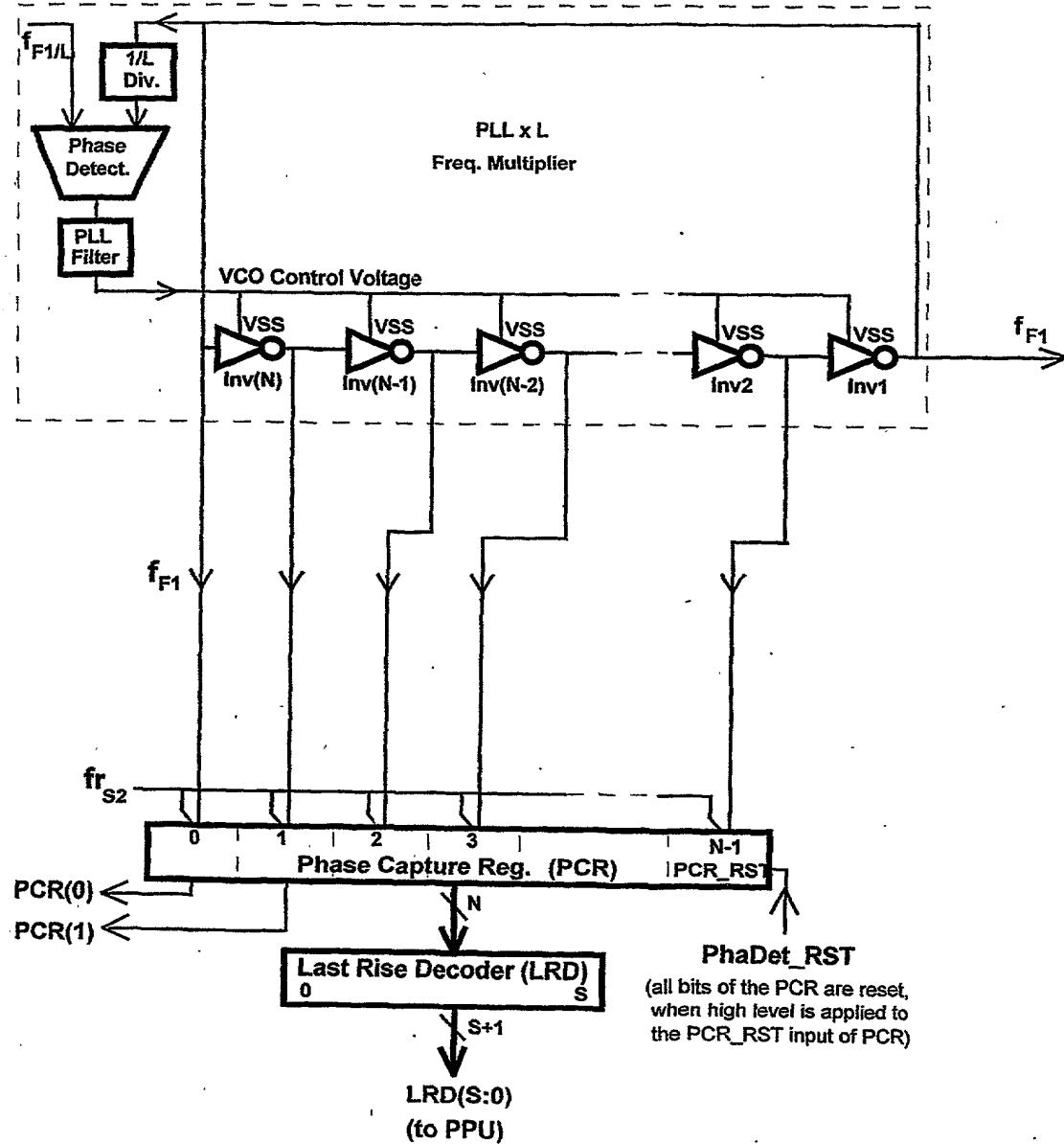
**For PCR(1)=1:**

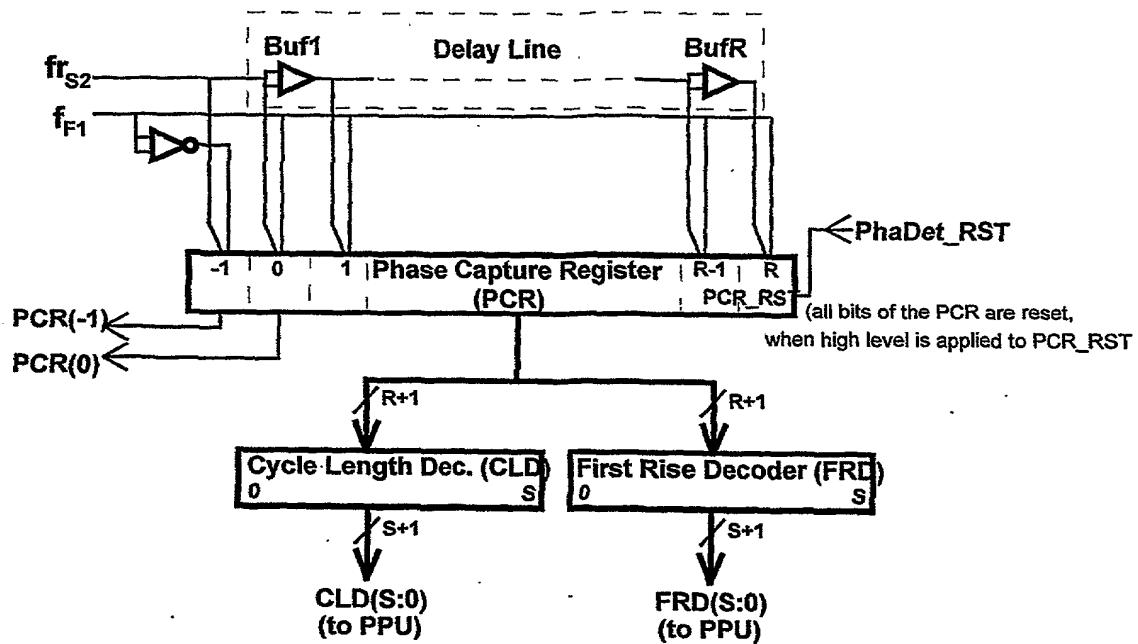
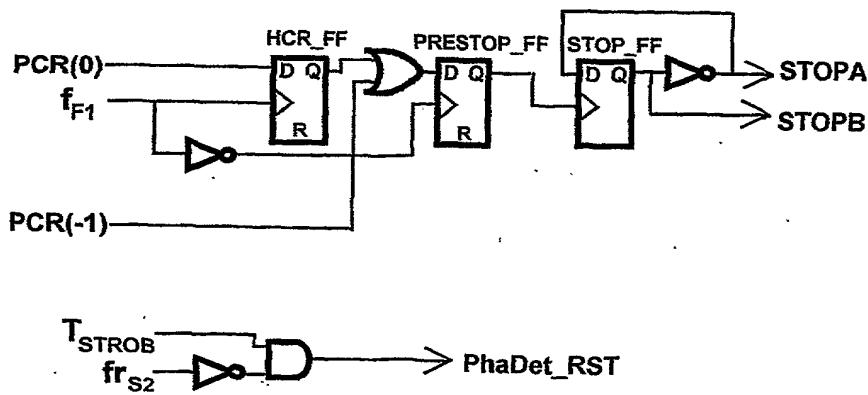
This arrow indicates  $f_{S2}$  appearance versus  $f_{F1}$  wave.  
The left side of the  $f_{F1}$  wave is captured in PCR by  $f_{S2}$ .



This arrow indicates  $STOP\_FF$  switching,  
before a second appearance of  $f_{F1}$  rising edge.

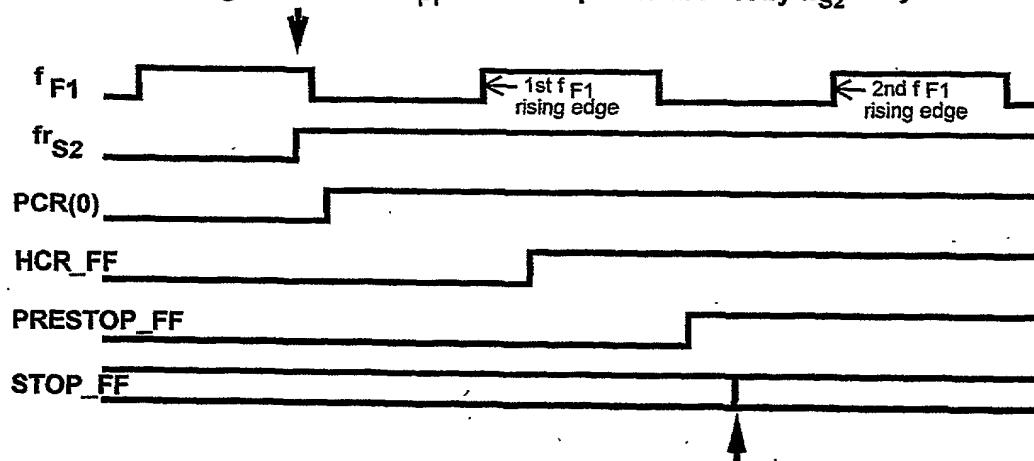
**Fig.3 High Resolution Extension of the HRPD Config.2**



**Fig.4 High Resolution Extension of the HRPD Config.3****Fig.5 Detector Timing Circuit of the HRPD Config.3**

**FIG.6 Timing Analysis of the HRPD Config.3****For PCR(0)=1:**

This arrow indicates  $f_{S2}$  appearance versus  $f_{F1}$  wave.  
 The right side of the  $f_{F1}$  wave is captured in PCR by  $f_{S2}$  delay line.

**For PCR(-1)=1:**

This arrow indicates  $f_{S2}$  appearance versus  $f_{F1}$  wave.  
 The right side of the  $f_{F1}$  wave is captured in PCR by  $f_{S2}$  delay line.

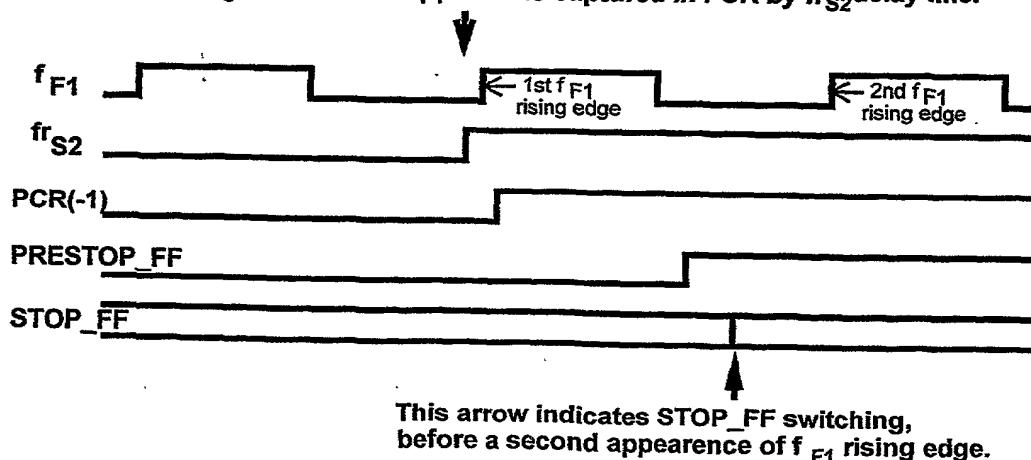
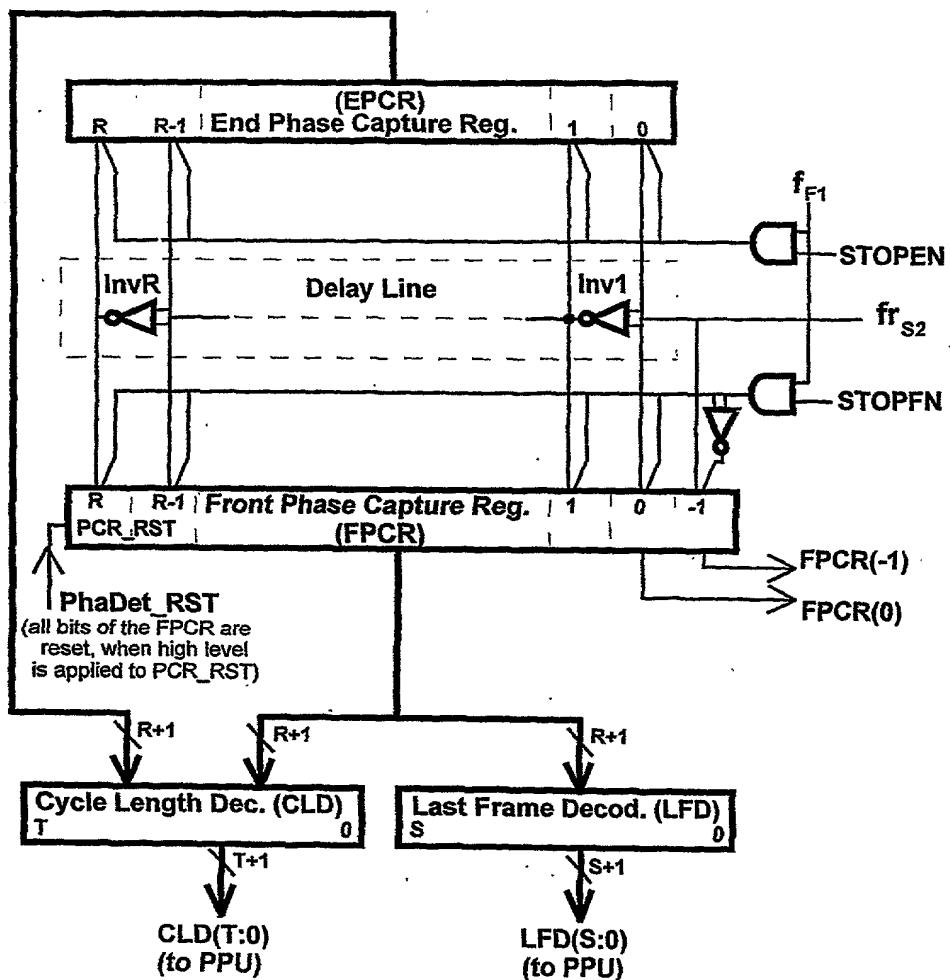


Fig.7 High Resolution Extension of the HRPD Config.4



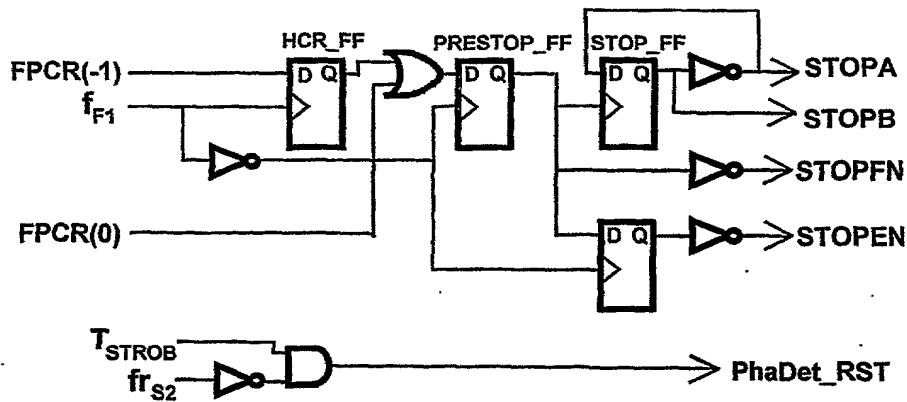
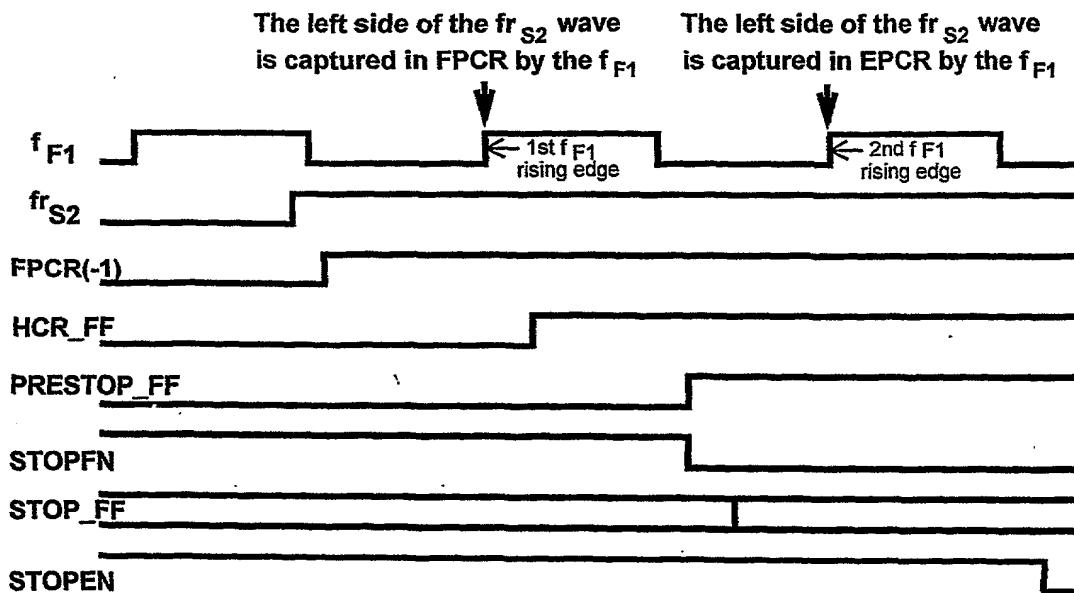
**Fig.8 Detector Timing Circuit of the HRPD Config.4**

FIG.9 Timing Analysis of the HRPD Config.4

**For FPCR(-1)=1:**



**For FPCR(0)=1:**

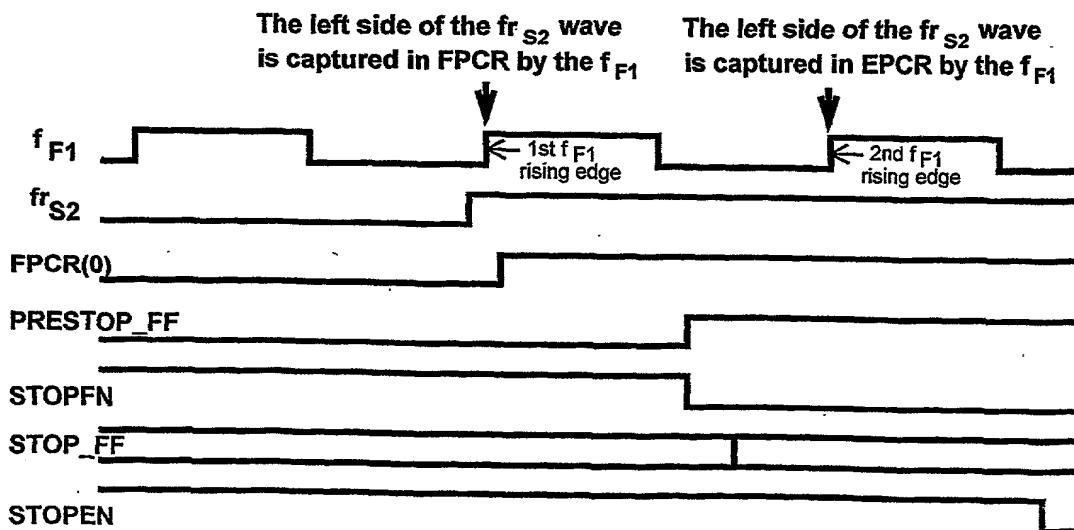


Fig.10 High Resolution Extension of the HRPD Config.5

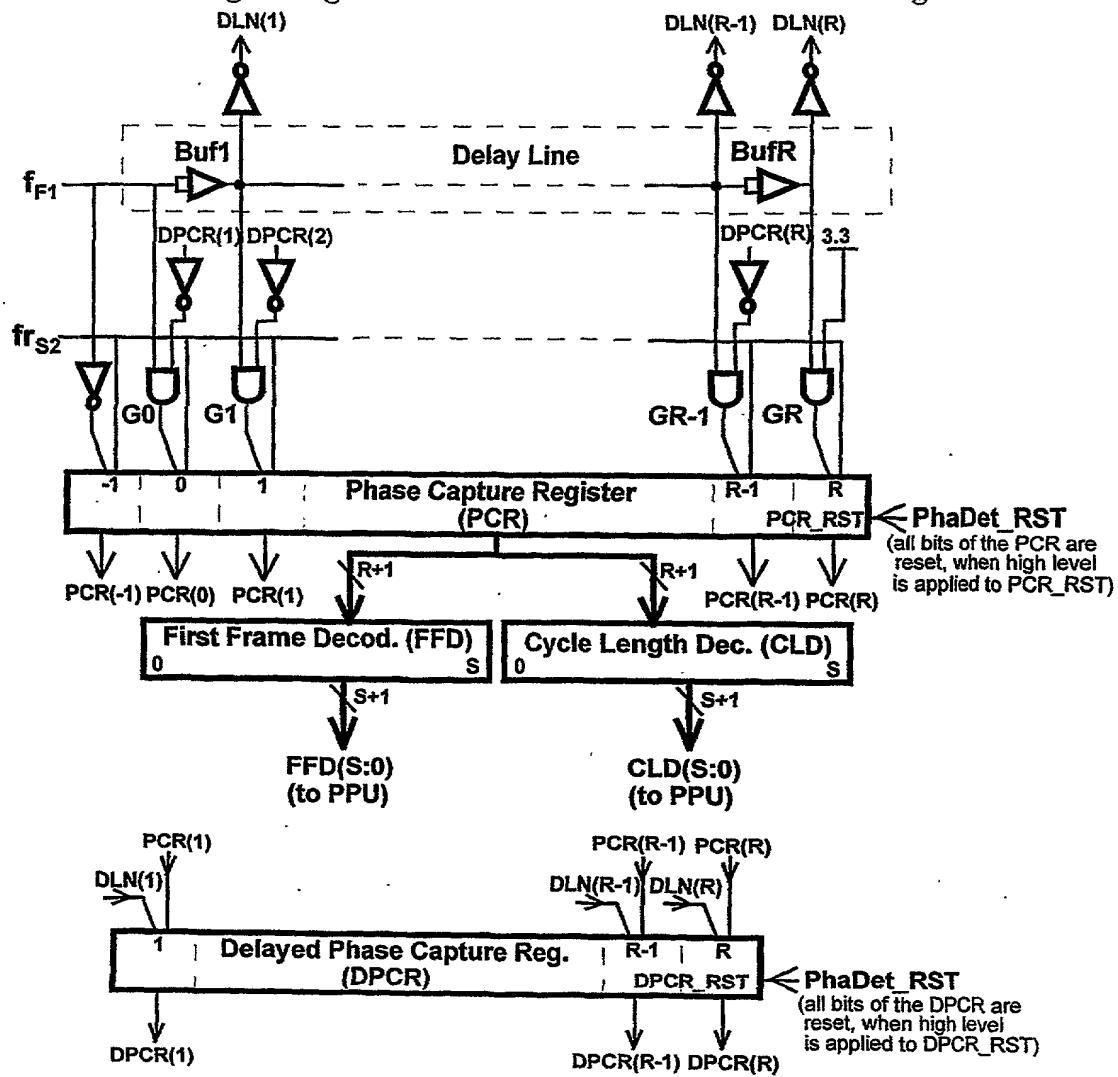
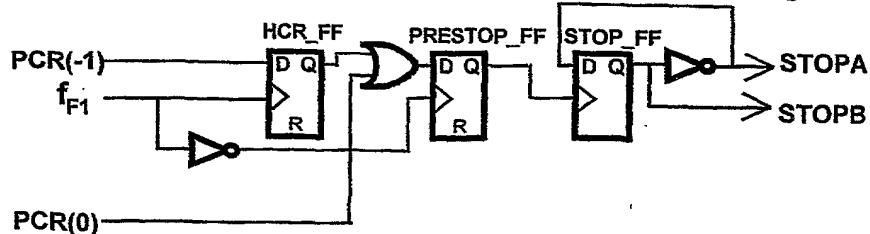


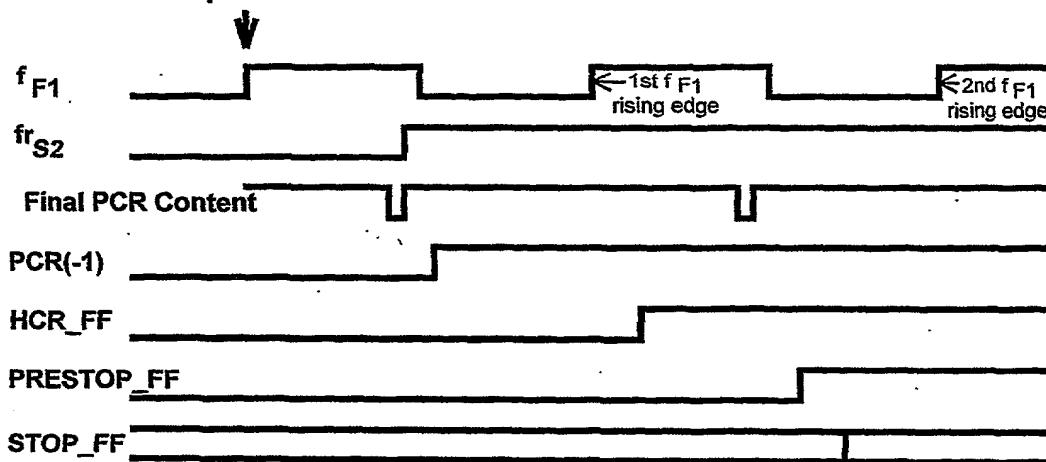
Fig.11 Detector Timing Circuit of the HRPD Config.5



**FIG.12 Timing Analysis of the HRPD Config.5**

**For PCR(-1)=1:**

The right side of the  $fr_{S2}$  is captured in the PCR.



**For PCR(0)=1:**

The right side of the  $fr_{S2}$  is captured in the PCR.

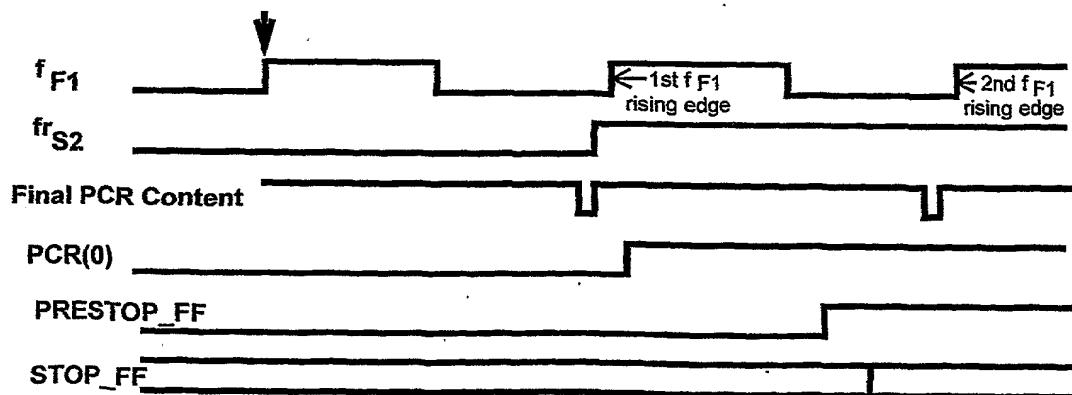
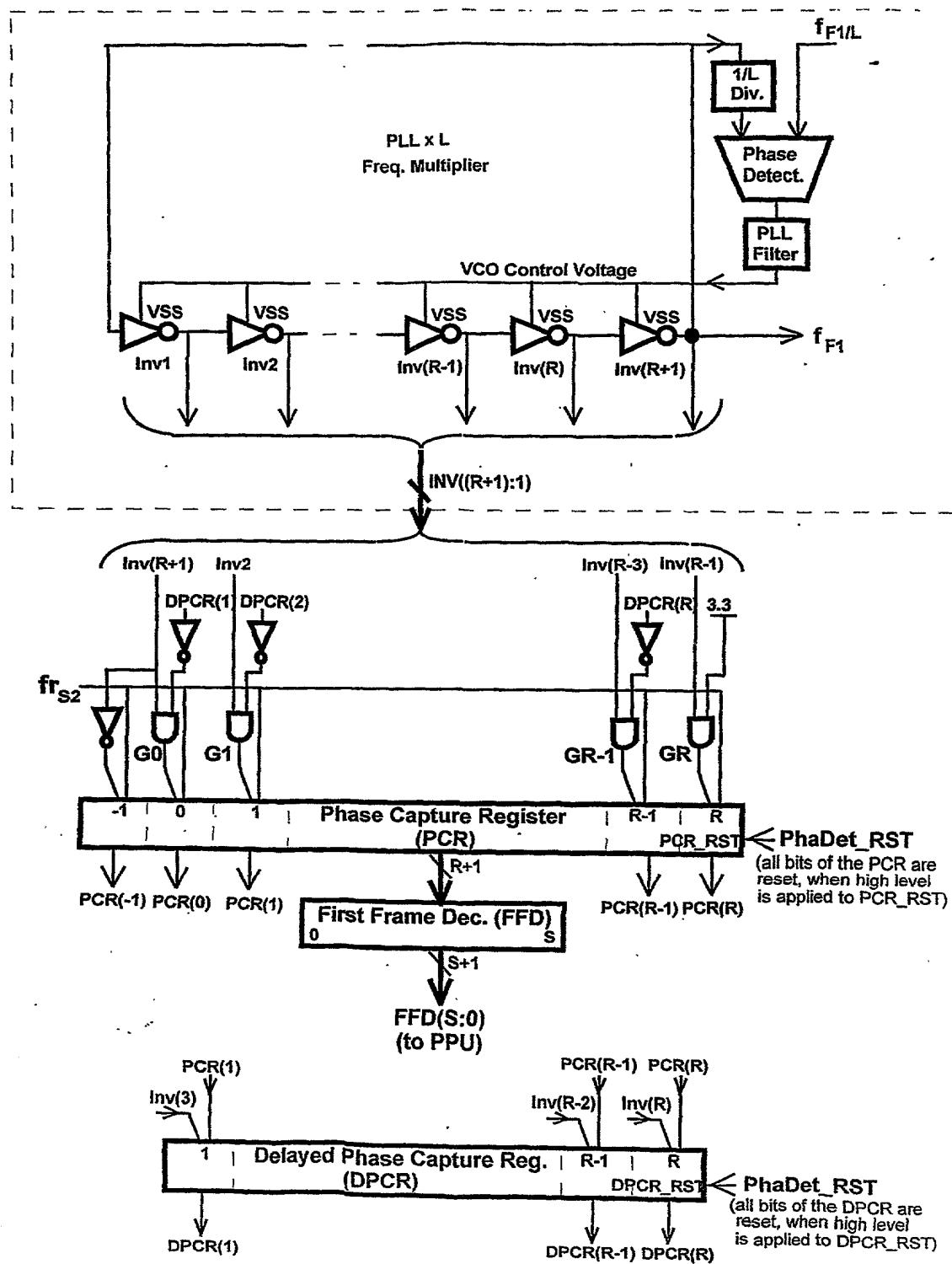


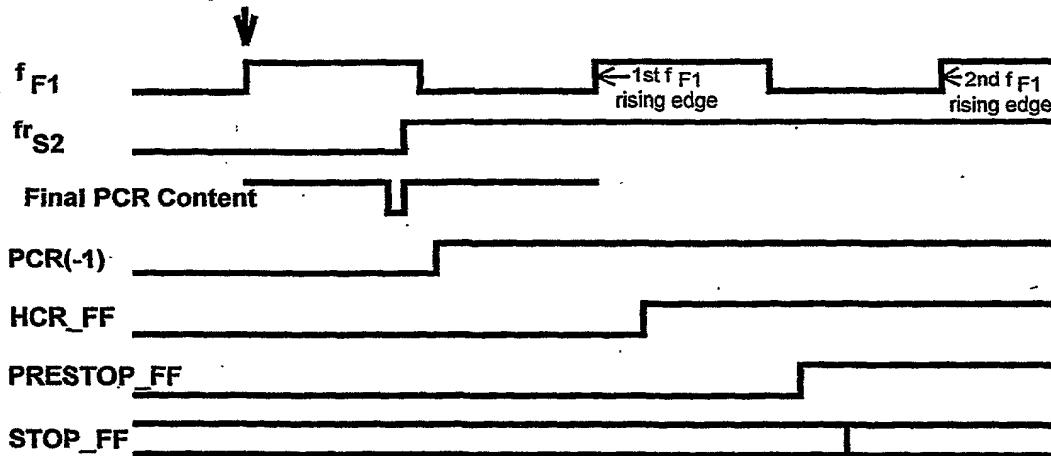
Fig.13 High Resolution Extension of the HRPD Config.6



**FIG.14 Timing Analysis of the HRPD Config.6**

**For PCR(-1)=1:**

The right side of the fr<sub>S2</sub> is captured in the PCR.



**For PCR(0)=1:**

The right side of the fr<sub>S2</sub> is captured in the PCR.

